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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,010	11/13/2001	Tetsuyoshi Inoue	204552021700	6384

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EXAMINER

NGUYEN, TUAN N

ART UNIT PAPER NUMBER

2828

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No. 09/987,010	Applicant(s) INOUE ET AL.	
	Examiner Tuan N Nguyen	Art Unit 2828	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 05 February 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☒ they raise the issue of new matter (see Note below);
 - (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See continuation sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: _____.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____



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Continuation of 5. does NOT place the application in condition of allowance because: In view of the new changes, claims 1, 2 fail to provide a structural relationship differences, such that the combination of Inaba (US 6255742) in view of Masayasu (JP 08-095504) and Hainz (US 5138428) still meet the amended claims limitation. Claim 2 added the electrical die-bond paste "including metal filler"; it is within one skill in the art to recognize that if it is an electrically conductive die-bond paste, it inherently has certain metal filler type such as silver paste as disclosed by Yoshiura JP-08-095504. In addition, Inaba '742 discreetly shows from figures 1-22 that the semiconductor mountin onto a base portion.

With respect to claim 1 further added the laser chip is kept pressurized "by a collet bearing a weight" toward the base portion, and finally curing the conductive die-bond paste "in a thermostat without pressurizing by the collet". It is vague and indefinite as to the thermostat structure and function, or how curing is done in "a thermostat" - cause the claims confusing, vague, and indefinite. Similar to the answer in the Final office action, and in addition that it has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art. In re Karlson, 136 USPQ 184. Since claim 1 recite the same or identical elements/limitations it is inherent to use patents '742, JP '504, and '428 to recite the method for manufacturing a semiconductor device, product by process.

With respect to claim 6 (new), the claim further require that the content ratio of silver in the conductive die-bond paste is 82%-84%. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, in this case the percentage of silver in conductive die-bond paste. In re Aller, 105 USPQ 233.

Similar to the answer in the Final Office Action, the claims are not patentable distinct from the combination of Inaba (US 6255742) in view of Masayasu (JP 08-095504) and Hainz (US 5138428).